

EDUCATION	<i>Laurea Specialistica</i> , Theoretical Physics, June 2011 Scuola Normale Superiore, Pisa Thesis advisor: Andrea Ferrara <i>Master of Arts</i> , Physics, May 2013 Columbia University	
POSITIONS	<i>Graduate student researcher, Columbia University Physics Department</i>	2011-
PROFESSIONAL ACTIVITIES	Referee for MNRAS	
TEACHING	<i>Graduate student instructor</i> Columbia University, NY, Physics Department <ul style="list-style-type: none">• Introductory Physics Lab (pre-medical) Fall 2011, Spring 2012• Introductory Physics Lab (engineers) Fall 2012, Spring 2013• Physical Cosmology (TA, grading), Fall 2012• Particle Astrophysics and Cosmology (TA, recitations), Spring 2013• EKA Advanced Physics Laboratory (TA), Fall 2013-• Particle Astrophysics and Cosmology (TA, grading), Spring 2015 <i>Instructor</i> Columbia University, NY, Science Honors Program Introduction to Cosmology for high school students	2011-

First authored

1. *Supermassive black hole ancestors*
A.Petri, A.Ferrara, R.Salvaterra; Mon. Not. R. Astron. Soc. **422**, 1690-1699 (2012)
2. *Cosmology with Minkowski Functionals and moments of the weak lensing convergence field*
A.Petri, Z.Haiman, L.Hui, M.May, J.M.Kratochvil; Phys. Rev. D. **88**, 123002 (2013)
3. *Impact of spurious shear on cosmological parameter estimates from weak lensing observables*
A.Petri, M.May, Z.Haiman, J.M.Kratochvil; Phys. Rev. D. **90**, 123015 (2014)
4. *Emulating the CFHTLenS weak lensing data: Cosmological constraints from moments and Minkowski functionals*
A.Petri, J. Liu, Z.Haiman, M.May, L.Hui, J.M.Kratochvil; Phys. Rev. D. **91**, 103511 (2015)

5. *Sample variance in weak lensing: how many simulations are required?*
A.Petri, Z.Haiman, M.May; Phys. Rev. D. **93**, 063524 (2016)

Collaborations

- *Cosmology constraints from the weak lensing peak counts and the power spectrum in CFHTLenS data*
J.Liu, A.Petri, Z.Haiman, L.Hui, J.M.Kratochvil, M.May; Phys. Rev D. **91**, 063507 (2015)

TALKS

- *Cosmology with Minkowski Functionals and moments of the weak lensing convergence field*
27th Symposium on Relativistic Astrophysics, December 8-13, 2013, Dallas, TX
<http://nsm.utdallas.edu/texas2013/proceedings/4/4/b/Petri.pdf>
- *Cosmology with Minkowski Functionals and Moments of Weak Lensing Fields*
Santa Fe Cosmology Workshop, July 2014
- *Constraining cosmology with weak lensing: higher moments in CFHT*
AstroFest 2015, Columbia University, September 11th 2015
- *Non-gaussian statistics task force: the simulations*
LSST DESC collaboration meeting, Argonne National Laboratory, Chicago, October 28th 2015